more difficult, facilitates the procedures described and results in better outcomes.

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## Single or double lung transplantation for pulmonary hypertension

*To the Editor:*

We read with interest the article on lung transplantation by Gammie and associates.[1] They compared short- and long-term outcomes after single (STL, n = 21) and double lung transplantation (DLT, n = 37) for patients with pulmonary hypertension, defined as mean pulmonary artery pressure greater than 30 mm Hg. They concluded that SLT is the operation of choice for recipients with pulmonary hypertension.

We are perplexed by the conclusion, especially in light of an earlier report from the same institution proposing the opposite. In an article published in 1994, the authors[2] compared the outcomes of the patients with and without pulmonary hypertension who underwent SLT. The survival for the 19 patients with pulmonary hypertension was dismal after SLT. They concluded that "despite a shortage of donor organs, single-lung transplantation may be suboptimal therapy in patients with PH [pulmonary hypertension]."

Our review of these authors' data seems to indicate that the cohort of patients with pulmonary hypertension who underwent SLT comprises most of the experience in both reports except for 2 additional patients in the 1998 article. Both articles have provided convincing data supporting their conclusions. Unfortunately, they contradict each other! It would be important for the authors to discuss and clarify the discrepancies between these 2 articles and to elaborate on their reasoning behind the change in treatment from bilateral SLT to SLT for patients with pulmonary hypertension. Citing their 1994 article merely for the definition of pulmonary hypertension without a full discussion cannot serve the transplant community well, especially when there is a major change in recommendation. We would welcome the authors' comments regarding these 2 articles.

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*Reply to the Editor:*

We hope to clarify the concerns expressed by Park and his colleagues regarding articles published by our group on the issue of single (SLT) versus double lung transplantation (DLT) for pulmonary hypertension. The original article reported an early experience with SLT for patients with pulmonary hypertension: it comprised patients undergoing transplantation from 1990 through late 1992 and included an analysis of 10 SLTs for pulmonary vascular disease and 9 for parenchymal disease with pulmonary hypertension as an associated finding.[1] The former group had systemic pulmonary artery pressures, whereas the latter had substantially lower pulmonary artery pressures. Follow-up was less than 18 months. The more recent article included patients undergoing transplantation through 1996 (including 10 patients from the earlier series) and focused on those with pulmonary vascular disease.[2] The mean pulmonary artery systolic pressure of this cohort was 100 mm Hg. Thus we were able to compare 37 DLTs and 21 SLTs for pulmonary vascular disease, with a mean follow-up in excess of 3 years. The survival data are unequivocal, demonstrating identical survival in the SLT and DLT groups. The improved results over time of SLT for pulmonary hypertension likely reflect the growing maturity of our program, inasmuch as we have gained experience with donor selection and perioperative management. Our data are strikingly similar to those of the St Louis program, which reported a 3-year survival of 61% among 34 consecutive SLTs for pulmonary hypertension.[3]

The earlier paper concluded, "Further study comparing single versus bilateral lung transplantation for pulmonary hypertension is necessary." We believe that our most recent experience, with nearly 6 times as many patients with pulmonary vascular disease, represents just that.

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